

**MICHIGAN DEPARTMENT OF CIVIL SERVICE  
JOB SPECIFICATION**

**INFORMATION TECHNOLOGY PROGRAMMER/ANALYST TRAINEE**

**JOB DESCRIPTION**

Employees in this job, as on the job trainees, function as information technology professionals, participating in a variety of analytical and programming assignments that provide for the development, enhancement, and maintenance of automated data, voice, or video application programs, application systems, and operating systems software within mainframe, network, and client server environments.

There is one classification in this job.

**Position Code Title – Information Technology Programmer/Analyst Trainee-E**

**Information Technology Programmer/Analyst Trainee 9**

This is the entry level. As a trainee, the employee carries out a range of professional Information Technology Programmer/Analyst assignments while learning the methods of the work.

This class is designed to facilitate career movement for individuals who are selected to participate in an on-the-job training and educational program leading to a professional career as an Information Technology Programmer/Analyst. Incumbents of this class are accepted into and participate in a Civil Service approved Informational Technology Training Program, and are eligible for classification in the Information Technology Programmer/Analyst classification after satisfactory completion of the prescribed two-year plus IT Training Program.

Current state employees selected for this class retain their former employment preference level and rate of pay, if possible, while learning the knowledge, skills, and techniques of the Information Technology Programmer/Analyst. Upon appointment to the Information Technology Programmer/Analyst Trainee class, the employee shall maintain the current rate of pay if it is less than the maximum of the pay range for the Information Technology Programmer/Analyst Trainee class, and less than the maximum of the Information Technology Programmer/Analyst in which the employee will ultimately be classified. If the employee is paid more than the maximum of the Information Technician Programmer/Analyst Trainee or more than the maximum of the Information Technology Programmer/Analyst class to which the employee will be moved, the employee shall be paid the lesser of these two rates, in accordance with Compensation Plan, Procedure 1, Standard XII, A.

For new state employees, pay upon appointment will be in accordance with Compensation Plan, Procedure 1, Standard V.

Employees in this class participate in a Civil Service approved Information Technology training program which includes performance of a variety of non-supervisory professional Information Technology activities, in a learning capacity. Training plans are developed by the appointing authorities and must be approved by the Department of Civil Service before implementation. Work is performed through the application of a body of knowledge related to established practices, procedures, methods, and policies, or theory and concepts of the Information Technology field. Work is performed under close supervision and assignments are reviewed in progress.

This is a single-level class. After successful completion of the prescribed training program, the employee will be reclassified as an Information Technology Programmer/Analyst classification, in accordance with classification standards.

In the event of a reduction in force, individuals entering this class from a position in a class having a higher employment preference level shall retain their former employment preference class and level.

Appointing authorities should enter a comment line on the employee's employment history record indicating that positions in this class will be reclassified as an Information Technology Programmer/Analyst classification.

### **JOB DUTIES**

**NOTE:** The job duties listed are typical examples of the work performed by positions in this job classification. Not all duties assigned to every position are included, nor is it expected that all positions will be assigned every duty.

The employee works under the immediate supervision of other professional or management personnel and receives training and experience in performing a variety of professional information technology duties. The examples of work listed below are typical of the work of employees in the Information Technology Programmer/Analyst class. All duties assigned to every employee may not be included, nor is it expected that all employees will be assigned every duty.

As an on-the-job trainee, in a learning or limited capacity:

Writes, compiles, and modifies application programs for computerized systems and keys into program code.

Develops or acquires test data and runs tests to determine the accuracy of program logic to produce desired results; debugs and revises programs based on test results.

Develops, compiles, maintains and documents computer monitoring systems, vendor supplied packaged programs, macros, utilities, data, voice and video communications programs, and other highly technical programs.

Uses program specifications to prepare the logic sequence of program source statements in the development, modification, documentation, and maintenance of computer programs.

Develops and prepares documents for the general design of solutions that meet system requirements, including the selection of alternative approaches.

Develops and maintains detailed databases for electronic data processing.

Develops and maintains automated data processing systems and computer application programs.

Develops specifications to detail what new systems or enhancements to existing systems can accomplish.

Develops, implements and maintains software for computer operating systems.

Develops specifications for hardware, software, and network configurations.

Develops hardware, software, and network operation and installation procedures.

Serves as liaison with users concerning requests, usage, standards, and other developmental, production, or hardware/software matters.

Develops structured diagrams for the specifications of computer or network programs.

Develops detailed systems operations designs.

Provides capacity planning for computer systems and networks.

Coordinates the implementation of data, voice and video communications equipment and applications with users, vendors, data centers and network operation centers.

Tests programs and systems and integrates system modules.

Converts and implements new systems; or upgrades existing systems.

Develops, implements, and monitors information technology quality assurance standards.

Develops cost estimates and rationales for new systems, hardware and software purchases and system upgrades.

Evaluates equipment and software for purchase; provides training or arranges for vendor training for system users.

Evaluates, implements and provides customer support for third-party software.

Maintains records and prepares reports and correspondence related to the work.

Performs related essential functions appropriate to the class, as required.

### **JOB QUALIFICATIONS**

#### **Knowledge, Skills, and Abilities**

Some knowledge of personal computers and personal computer software.

Some knowledge of the theories, methods, procedures, policies, regulations, and laws related to the professional field.

Some knowledge of pertinent departmental programs.

Some knowledge of computer monitoring systems, vendor supplied packaged programs, macros, utilities, and other highly technical programs.

Ability to prepare detailed written instructions and documentation.

Ability to analyze instructions and data.

Ability to convert specifications to computer language.

Ability to gather and analyze facts, define problems, and devise solutions.

Ability to diagnose and correct hardware and software problems.

Ability to plan and develop basic and detailed mechanical and clerical procedures for use in data processing systems.

Ability to use programming procedures and techniques in the implementation of computer programs.

Ability to effectively make oral and written reports and presentations and prepare clear and concise graphs and charts.

Ability to conduct interviews and establish and maintain effective relationships with systems users.

Ability to maintain records, prepare reports, and conduct correspondence related to the work.

Ability to communicate technical terminology at a level appropriate to the audience.

Ability to satisfactorily complete and apply in-service training concepts.

Ability to maintain records and prepare reports and correspondence related to the work.

Ability to communicate effectively with others.

Ability to maintain favorable public relations.

**Working Conditions**

None.

**Physical Requirements**

None.

**Education**

Possession of a bachelor's degree in any major.

**Experience**

None.

**Alternate Education and Experience**

Possession of an associate's degree with significant course work 16 semester (24 term) hours in computer science, data processing, computer information systems, data communications, networking, systems analysis, computer programming, or mathematics may substitute for the educational portion of the training program.

Possession of a high school diploma or GED Certificate and four years of ECP Group One administrative support experience at the advanced 9-level or two years of technician or paraprofessional experience at the experienced-level (E9, E10, or E11-levels) may substitute for the educational requirement.

Possession of a high school diploma or GED Certificate and two years of experience as a first-line supervisor or one year of experience as a second-line supervisor may substitute for the educational requirement.

**Special Requirements, Licenses, and Certifications**

None.

**NOTE:** Equivalent combinations of education and experience that provide the required knowledge, skills, and abilities will be evaluated on an individual basis.

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**JOB CODE, POSITION TITLES AND CODES, AND COMPENSATION INFORMATION**

**Job Code**

**Job Code Description**

INFOTCAP

Information Technology Programmer/Analyst Trainee

**Position Title**

**Position Code**

**Pay Schedule**

Information Technology Programmer/Analyst Trainee-E

ITANPGE

NERE-002P

ECP Group 1  
Revised 11/6/00  
SA/VLWT